- -- New collection programs coming on stream will offer significant qualitative improvements, thus increasing our opportunities to obtain comprehensive, accurate, and timely information when it is needed. But handling this information will require better data processing systems.
- -- A word of Caution. Not all of the new information is additive--some new sources replace other, less reliable sources. And not all analytical disciplines receive proportionate gains--much of the new collection is concentrated in military and technical areas.

ADP Impact Is Becoming Ubiquitous, Across the Board.

- -- Several trends are making us dependent on computer support to fulfill our mission: demands to improve the overall quality of analysis; growth in the complexity of issues and of raw intelligence data bases; an increase in the range of analytic issues addressed; shortened deadlines; and the need to develop improved methods for presenting and displaying our products.
- -- Some analytic accounts could not be covered in an acceptable way without the use of computers--such as Soviet strategic weapons and land forces, Soviet agricultural performance, Soviet arms transfers, and economic forecasting for complex economies.
- -- A number of key policy concerns that transcend disciplines and single geographic areas, thus requiring analysis of vast amount of data, have become priority issues: terrorism, narcotics, nuclear proliferation, insurgencies, world energy supplies, and Third World debt.

What Various Analysts Use ADP For, Impact on the Work Setting, Productivity.

- -- Improvements in efficiency are commonplace: analysts receive, review, and file their mail faster.
- -- Weapons analysts have traditionally taken the lead in applying ADP to support their analytic effort, but they, too, have discovered innovative applications of ADP to analysis of sophisticated technical data, order-of-battle information, and historical records.
- -- Economic analysts have made extensive use of shared data bases to support their analysis on various military aid programs, international trade, and economic stability.
- -- Political analysts generally have been less enthusiastic about the use of ADP as an analytic tool, preferring intuitive reasoning and conventional research methods. Nevertheless, the ability to build a data base of key indicators of a country's foreign involvement, for example, has sparked increased interest in using ADP in political analysis.

New Methodologies.

-- Although analysis of military hardware suffers from limited data, it is relatively "easy" to handle because of the availability of statistical modeling (e.g., the accuracy of ICBMs, underground testing). Force projection problems are more difficult in that standards for a good force

projection model have yet to be agreed upon. Political problems, however, are the most difficult because they do not readily lend themselves to statistical analysis.

- -- The Office of Global Issues in CIA uses a number of significant new methodologies: an image processing system that facilitates analysis of geographic-images; various models and data bases that assist in analyzing and forecasting agricultural crops; political indicators to study in stability and insurgency.
- -- The Office of Soviet Analysis makes heavy use of military and economic models for analysis. Political analysts are aided by a multidisciplinary data base of Soviet and Soviet-sponsored military, economic, and political involvement in the Third World and the developed West. The data base provides analysts with an independent index to compare soviet foreign policy intentions with actual performance.
- -- The Office of Near Eastern and South Asian Analysis has used econometric models and spreadsheets for forecasting purposes and to perform scenario analysis. Influence diagrams, peace gaming, analysis of polling data, a cybernetic model, and a paths to leadership model are now being used in political analysis. War gaming, sophisticated mappings systems, and spreadsheet-based data bases are being used in the Office's military analysis.

V. Production and Consumer Needs

- -- The quantity and quality as well as the presentational_style of products put out by the community have undergone significant change over the last ten years. This has been the result of changes in the numbers and needs of consumers as well as greater responsiveness and competitiveness among producers.
- -- In FY 1987 the community produced a few thousand items of finished intelligence that directly responded to national requirements (National Intelligene Topics). In addition, the community produced a vast amount of current intelligence and products not directly tied to national requirements.
- -- National requirements have more than tripled over the last 10 years. During the same period, the number of high-level consumers of community products has more than doubled. This figure encompasses both new organizational subscribers--DEA, FAA, and NASA--and new individual subscribers within traditional consumers of intelligence such as the White House, and the Departments of State and Defense.
- -- The DI's clientele has broadened to include Commerce, Treasury, and Energy: Its support to arms control has grown to include both the negotiators of new agreements and verifiers of existing ones.
- -- Congress has become a key consumer. Eight congressional committees

 get the CIA's daily national intelligence report. In 1986 the CIA sent some

House is not always pleased with the procedure since this intelligence is often used to criticize and challenge policy, to set one executive agency against another, and to expose disagreements within the Administration.



- -- DIA traditionally has provided key intelligence support to the Joint Chiefs of Staff and senior military echelons. A few years ago DIA expanded its user base to include the CINCs, the U&S commands, as well as various tactical levels in the services.
- interdisciplinary analysis; clearer separation of fact from analysis; more systematic and careful reference to sources; increasing use of data bases to produce periodic publications; greater emphasis on conciseness and clarity as well as policy relevance; and greater use of outside experts to review products and help create new methodologies and ways to manage our information.
- -- The presentational styles of all major intelligence agencies have changed over the years. Moreover, "marketing techniques" have been refined and expanded, with the agencies vigorously going out to "sell" their product.

VI. Challenges to Management

-- The management of analysis at CIA has undergone a fundamental change over the years: analysts are encouraged to attend conferences, undertake

academic training, and accept rotational assignments in other agencies and abroad. The effect of these changes has been felt on quality, production, and style.

-- The need to craft the product carefully and pay attention to its presentation has grown exponentially. Moreover, greater involvement of Congress and its greater access to intelligence products, coupled with the "leakmanship" that has grown in the past decade or so, means that any product produced by the Intelligence Community can become politically controversial_and_debated_in_the media.



- -- Budgetary constraints will call for a more efficient use of analytic resources, including the use of contractors and outside experts.
 - * Motivate and reward a quality workforce.
 - * Make power of ADP fully available.

^{*} C/NIC will complete after returning from TDY.